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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/719,002

Applicant(s)

SPIVACK ET AL.

Examiner

Thanh-Ha Dang

Art Unit

2163

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-9, 13-16, 18-22 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) 2, 10-12, 17, 23 and 29-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 13-16, 18-22 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/25/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 3-9, 13-16, 18-22 and 24-28 are rejected in this Office Action.
2. Applicant cancelled Claims 2, 10-12, 17, 23 and 29-35.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/02/08 has been entered.

Response to Amendment

4. Receipt of Applicant's Amendment filed on 10/02/08 is acknowledged.
5. Applicant cancelled Claims 29-35 and therefore the Claim Rejections - 35USC101 given in the office action mailed 08/05/08 are moot.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In view of MPEP 2106.IV.B: Determine Whether the Claimed Invention Falls Within An Enumerated Statutory Category and based on Supreme Court precedent and recent Federal Circuit decisions, a 35 USC § 101 process must:

1) be tied to another statutory class (such as a particular apparatus)

OR

2) transform underlying subject matter (such as an article or materials) to a different state or thing.

In view of the above reasons, Claim 1 failed to comply to the above 35 USC § 101 requirements 1) or 2), and therefore is directed to non-statutory subject matter. Dependent Claims 3-9, 13-16, 18-22 and 24-28 are also rejected.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 21, 22 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

- Claim 1 recites the term "definable" wherein definable is capable of being defined that is not a positive limitation but only require the ability to so perform, and therefore may or may not perform the recited function.
- Claim 1 recites the term "identifiable" wherein identifiable is capable of being identified that is not a positive limitation but only require the ability to so perform, and therefore may or may not perform the recited function.
- Claim 3 recites the term "can be": as such, it may or may not perform the recited function, and therefore the limitation is not a positive limitation.
- Claim 21 recites the term "specifiable" wherein specifiable is capable of being specified that is not a positive limitation but only require the ability to so perform, and therefore may or may not perform the recited function.
- Claim 22 recites the term "retrievable" wherein retrievable is capable of being retrieved that is not a positive limitation but only require the ability to so perform, and therefore may or may not perform the recited function.
- Claim 24 recites the term "modifiable" wherein modifiable is capable of being modified that is not a positive limitation but only require the ability to so perform, and therefore may or may not perform the recited function.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-9, 13-16, 18-19, 22 and 24-28 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,847,974 issued to David C. Wachtel ("Wachtel").

As to **Claim 1**, *Wachtel teaches* a method of semantically representing a target entity, the method comprising:

- identifying a set of meta-tags in the target entity to semantically represent a set of attributes associated with the target entity in a semantic object (*Figures 5-7A-B, column 3, lines 52-61*);
- wherein the set of attributes comprises at least one attribute for specifying an access policy of the semantic object representing the target entity (*column 11, lines 9-17*);
- wherein a type of the target entity is one of a physical entity, a software entity, and an intangible entity (*Figure 5, column 10, lines 12-17*);
- identifying a metadata entry for a meta-tag of the set of meta-tags (*Figures 1 (label27/33/29/31) and 14-18 wherein the exemplary messages read on receiving a metadata entry illustrated in figures 14-18 that show meta-tag of the set of meta-tags limitation*);

- wherein the metadata entry semantically represents an attribute of the set of attributes (*Figures 5-7A-B, wherein metadata entry domicile or address read on attribute of the set of attributes limitation*);
- wherein one or more of the metadata entry and the meta-tag is definable by an ontology for enabling access to the target entity (*column 10, lines 26-38*);
- wherein the target entity is identifiable via one or more of the meta-tag and the metadata entry associated with the semantic object (*Figures 7A-B, column 11, lines 36-60*).

As to **Claim 3**, *Wachtel teaches* further comprising a method for documenting information, the method comprising:

- creating a second semantic object that is configured to represent resource information or tacit information, the second semantic object comprising meta-tags for identifying semantic information, and rules regarding at least one of: how the second semantic object (i) interacts with, (ii) is manipulated by, and (iii) is displayed to human beings and automated processes (*Figures 4-7A-B, wherein person, domicile, street, corporation, or address read on second semantic object claimed limitation, column 9, lines 28-39; columns 10-11 lines 1-67*);
- seeking to detect an information resource containing information that can be represented by the second semantic object (*Figures 4-7A-B, column 11, lines 1-17*); and

- if the information resource is found, linking the second semantic object to the information resource such that the second semantic object represents the information resource, wherein the second semantic object is also configured to have a link to or from any number of other semantic objects (*Figures 4-7A-B, column 11, lines 35-67*).

As to **Claim 4**, *Wachtel teaches* wherein the information resource is found, the method further comprising providing the second semantic object with meta-data about the information resource (*Figures 4-7A-B and 8, column 13, lines 9-46*).

As to **Claim 5**, *Wachtel teaches* wherein the information resource is not found, and wherein the second semantic object represents the tacit information (*Figure 5 wherein either domicile or address read on the second semantic object representing tacit information when optional opt-out rules is applied, column 13, lines 27-35*).

As to **Claim 6**, *Wachtel teaches* wherein the second semantic object is created before seeking to detect the information resource (*Figure 4 wherein block142 read on second semantic object limitation*).

As to **Claim 7**, *Wachtel teaches* wherein the information resource is detected before creating the second semantic object (*Figure 4 wherein block140 read on the information resource limitation*).

As to **Claim 8**, *Wachtel teaches* wherein the information resource is detected upon the information resource being published (*Figure 4 wherein block144 read on the information resource limitation*).

As to **Claim 9**, *Wachtel teaches* wherein any entity that publishes the information resource triggers the creation of the second semantic object (*Figure 6, column 11, lines 9-26 wherein the creation of exemplaries service1 and service2 read on the claimed limitation*).

As to **Claim 13**, *Wachtel teaches* further comprising linking the second semantic object to at least one of the other semantic object in the library (*Figures 5-6 illustrate linking of semantic object to other semantic object in the library which is represented by label200*).

As to **Claim 14**, *Wachtel teaches* wherein the physical entity comprises, one or more of, a living organism, a person, a place, an organization, a corporation, an object, a physical item, a processor, a machine, a natural entity, and an artificial entity (*Figures 5-6 wherein label200,202 and 218 read on the physical entity limitation*).

As to **Claim 15**, *Wachtel teaches* wherein the software entity comprises, one or more of, a document, an email, an address book entry, a message, an instant message, a query, a discussion thread, a posting, an XML message, a file, a directory, multimedia content, a website, a web-page, a blog, and a data record (*Figures 7A-B and 14-18 read on the software entity limitation*).

As to **Claim 16**, *Wachtel in combination with Skeen teaches* wherein the intangible entity comprises, one or more of, a relationship, an interaction, a link, a semantic relationship, a keyword relationship, a personal relationship, a connection, a transaction, an event, a type of activity, knowledge, content, an idea, and a concept (*Figures 3-7 illustrate and read on the intangible entity imitation*).

As to **Claim 18**, *Wachtel teaches* wherein the set of meta-tags are at least partially determined the type of the target entity (*Figures 14-18 wherein each sample message read on the type of the target entity limitation*).

As to **Claim 19**, *Wachtel teaches* wherein the set of attributes of the target entity further comprises policies regarding one or more of interaction with the target entity, manipulation of the target entity, and presentation of the target (*column 13, lines 27-35*).

As to **Claim 22**, *Wachtel teaches* wherein the metadata is retrievable on-demand (*column 11, lines 54-57*).

As to **Claim 24**, *Wachtel teaches* wherein the metadata is modifiable (*column 12, lines 22-24*).

As to **Claim 25**, *Wachtel teaches* wherein the metadata represents one or more of a link to second target entity having a first identified relationship matching one of a predetermined set of semantic or peer relationships and a link from a third target entity having a second identified relationship matching one of

the predetermined set of semantic or peer relationships (*Figures 4-7A-B, column 11, lines 3-8*).

As to **Claim 26**, *Wachtel teaches* wherein one or more of the first identified relationship and the second identified relationship is detected from a user triggered event (*Figure 12, column 24, lines 50-53*).

As to **Claim 27**, *Wachtel teaches* wherein one or more of the first identified relationship and the second identified relationship is user-specified (*column 5 line 65 – column 6 line 6*).

As to **Claim 28**, *Wachtel in combination with Skeen teaches* wherein the metadata provides data about the structure of the semantic representation (*Figures 7A-B, column 11, lines 36-44*).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,847,974 issued to David C. Wachtel ("Wachtel") as applied to Claims 1 and 29 above, and further in view of US Patent No. 7,384,196 issued to Skeen et al. ("Skeen").

As to **Claim 20**:

Wachtel teaches all the elements of Claim 1 as stated above.

Wachtel does not explicitly teach wherein the semantic representation is machine-readable or human-readable.

Skeen teaches wherein the semantic representation is machine-readable or human-readable (*Skeen, Figures 3-5, column 5, lines 9-14 and Figure 12, column 14, lines 53-54*). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine syntax based data transformation teaching of Skeen with method for intelligent data assimilation teaching of Wachtel to provide method and system which implement meta-data and meta-tag to define and to access concept within ontology.

As to Claim 21:

Wachtel teaches all the elements of Claim 1 a stated above.

Wachtel does not explicitly teach wherein the metadata is user-specifiable or machine-specifiable.

Skeen teaches wherein the metadata is user-specifiable or machine-specifiable (*Skeen, Figures 13-14, column 14, lines 58-61*) (*Skeen, column 14, lines 10-16 and 55-56 wherein machine processible and automated fashion read on machine-specifiable limitation*). Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine syntax based data transformation teaching of Skeen with method for intelligent data assimilation teaching of Wachtel to provide method and system which implement user-specifiable meta-data and meta-tag.

Response to Arguments

10. Applicant's arguments filed 10/02/08 with respect to claims 1, 3-9, 13-16, 18-22 and 24-28 have been fully considered but they are not persuasive. Examiner respectfully maintains the rejection cited for the following reasons:

- Applicant argues: Applicant stated on paragraph 2 of page 9 that "Wachtel does not describe, teach, or motivate metadata and meta-tags in a target entity that definable by an ontology, as claimed by applicant in independent claim 1".

Examiner responds. Examiner is not persuaded. Wachtel teaches in Figures 14-18 metadata and meta-tags in a target entity that definable by an ontology which is illustrated in Figures 5-7. Furthermore, Wachtel teaches in column 2 lines 14-23 wherein the method includes providing an ontology description of a data service a first logical search object, wherein the first logical search object generates a knowledge instances from the data set using the ontology description that read on Applicant's claimed limitation as recited in claim 1.

Citation of Pertinent Prior Art

11. The prior art made of record and not relied upon in form PTO-892 if any is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THANH-HA DANG whose telephone number is (571)272-4033. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thanh-Ha Dang
Examiner, AU 2163
January 28, 2009

/don wong/
Supervisory Patent Examiner, Art Unit 2163